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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/868,289	07/10/2001	Didier Arnoux	264/264	7287

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EXAMINER

SERGEANT, RABON A

ART UNIT

PAPER NUMBER

1711

DATE MAILED: 07/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/868,289

Applicant(s)
Arnoux et al.

Examiner
Rabon Sergent

Art Unit
1711



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s).
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3 6) ☐ Other:

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1. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b).

An abstract on a separate sheet is required.

2. Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The use of "can be" and "can have" within claims 1, 7, and 16 renders the claims indefinite, because it is unclear if or to what extent the language denoted by "can be" or "can have" is optional.

When not in the form of a prepolymer, it is unclear how the isocyanate component of claims 1 and 10 contains polytetramethylene glycol.

Within claim 10, the language, "obtainable by", renders the claims indefinite, because one cannot determine from the phrase which compositions are "obtainable by" applicants' process and which are not.

Within claims 2 and 11, applicants have failed to specify the type (weight or mole) and basis for the claimed percent values.

Within claims 6 and 15, it is unclear how the polyol relates to the polytetramethylene glycol component; it is unclear if the polytetramethylene glycol and the polyether polyol are mutually exclusive.

Within the last line of claim 4, there is an extra comma.

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The process of claim 19 is confusing, because the urethane/urea-forming composition of claim 1 comprises components which are met by claim 19's (a) and (b) components. It is unclear if further curatives and plasticizers are to be added to the composition's already present curative and phosphate or phthalate ester. Clarification of the process is required.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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4. Claims 1-3, 7, 10-12, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Werner ('606).

Patentee discloses a cast polyurethane composition comprising the reaction of a prepolymer, derived from toluene diisocyanate and polytetramethylene glycol, with a hindered aromatic diamine, in the presence of dioctyl phthalate. See column 1, lines 37-68. The position is taken that the composition will inherently cure within the claimed temperature range, in view of the reactivity of the diamine curing agents. Furthermore, no time frame has been specified for the duration of the cure.

5. Claims 1-4, 7, 10-13, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 6-16767.

The reference discloses a polyurethane composition comprising the reaction of a prepolymer, derived from toluene diisocyanate and polytetramethylene glycol, with DETDA, in the presence of dioctyl phthalate. See abstract. The position is taken that the composition will inherently cure within the claimed temperature range, in view of the reactivity of the diamine curing agents. Furthermore, no time frame has been specified for the duration of the cure.

6. Claims 4-9 and 13-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Werner ('606) or JP 6-16767, each in view of Singh et al. ('371) and further in view of Rizk et al. ('860) and Gabbard et al. ('956).

As aforementioned within paragraphs 4 and 5, the primary references disclose the production of polyurethanes, wherein a prepolymer, derived from toluene diisocyanate and polytetramethylene glycol, is reacted with a hindered aromatic diamine, in the presence of dioctyl phthalate. Firstly, the

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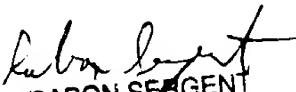
position is taken that it would have been obvious to cure the compositions at the claimed temperature range, in view of the use of the highly reactive diamine curing agents. Furthermore, the position is taken that the reaction rates of amine cured prepolymers were well understood at the time of invention and that it would have been well within the purview of the skilled artisan to tailor their curing profiles.

7. The primary references are silent with respect to the dimethylthiotoluene diamine curing agent and plasticizers, such as isodecyl diphenyl phosphate; however, these components were known constituents of polyurethanes at the time of invention. Dimethylthiotoluene diamine was a known hindered diamine for curing toluene diisocyanate based prepolymers. See column 3, lines 61+ within Singh et al. Plasticizers corresponding to those claimed are disclosed within Gabbard et al. at column 4 and Rizk et al. at column 6. The position is taken that it would have been obvious to incorporate the curing agent and plasticizers of the secondary references within the compositions of the primary reference, because it has been held that it is *prima facie* obvious to utilize a known component for its known function. In re Linder, 173 USPQ 356. In re Dial et al., 140 USPQ 244.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (703) 308-2982.

R. Sergent

July 1, 2002


RABON SERGENT
PRIMARY EXAMINER